

40000-0003 (50P4201)

09/711,325

IN THE CLAIMS:

No amendments are made by the present paper. Amendments were made in the first after-final response filed August 20, 2004. According to the Advisory Action of November 2, 2004, those amendments were to be entered on appeal. Notice of Appeal was filed by Applicant November 16, 2004. Therefore, the amendments made in the after-final response of August 20, 2004 are considered to have been entered and are reflected in the claims listed below.

1-2. (cancelled)

3. (previously presented) A set-top unit for connection to a cable television system comprising:

a control channel tuner;

at least one programming tuner; and

a processor for controlling said tuners;

wherein said processor controls said at least one programming tuner to scan a frequency band to locate a control channel;

wherein said processor controls said at least one programming tuner to tune frequencies in said frequency band and identify frequencies carrying an active signal; and

wherein said processor controls said control channel tuner to tune said frequencies carrying an active signal to locate said control channel.

4. (original) The set-top unit of claim 3, wherein, if said control channel is not found at one of said frequencies carrying an active signal, said processor controls said

40000-0003 (50P4201)

09/711,325

control channel tuner to tune frequencies in said frequency band until said control channel is located.

5. (original) The set-top unit of claim 3, wherein:
said at least one programming tuner comprises two programming tuners; and
said processor divides said frequency band between said two programming tuners and controls said two programming tuners to tune frequencies in different portions of said frequency band to identify frequencies carrying an active signal.

6. (previously presented) A set-top unit for connection to a cable television system comprising:
a control channel tuner;
at least one programming tuner; and
a processor for controlling said tuners;
wherein said processor controls said at least one programming tuner to scan a frequency band to locate a control channel;
wherein said processor divides said frequency band among said control channel tuner and said at least one programming tuner, and controls each said tuner to search a different portion of said frequency band for said control channel.

7. (original) The set-top unit of claim 6, wherein:
said at least one programming tuner comprises first and second programming tuners;
and

40000-0003 (50P4201)

09/711,325

said processor divides said frequency band among said control channel tuner and said first and second programming tuners, and control each said tuner to search a different portion of said frequency band for said control channel

8. (original) The set-top unit of claim 6, wherein each tuner provides a signal at each tuned frequency to said processor for a determination as to whether said signal is said control channel.

9-10. (cancelled).

11. (previously presented) A method for acquiring a control channel of a cable television system with a set-top unit connected to said cable television system by controlling at least one programming tuner of said set-top unit to scan a frequency band to locate said control channel, said method comprising:

controlling said at least one programming tuner to tune frequencies in said frequency band and identify frequencies carrying an active signal; and

controlling a control channel tuner to tune said frequencies carrying an active signal to locate said control channel.

12. (original) The method of claim 11, wherein, if said control channel is not found at one of said frequencies carrying an active signal, said method further comprises controlling a control channel tuner to tune frequencies in said frequency band until said control channel is located.

40000-0003 (50P4201)

09/711,325

13. (original) The method of claim 12, wherein said at least one programming tuner comprises two programming tuners; and said method further comprises dividing said frequency band between said two programming tuners and controlling said two programming tuners to tune frequencies in different portions of said frequency band to identify frequencies carrying an active signal.

14. (previously presented) A method for acquiring a control channel of a cable television system with a set-top unit connected to said cable television system by controlling at least one programming tuner of said set-top unit to scan a frequency band to locate said control channel, said method comprising:

dividing said frequency band among a control channel tuner and said at least one programming tuner; and

controlling each said tuner to search a different portion of said frequency band for said control channel.

15. (original) The method of claim 14, wherein said at least one programming tuner comprises first and second programming tuners; and said method further comprises:

dividing said frequency band among said control channel tuner and said first and second programming tuners; and

controlling each said tuner to search a different portion of said frequency band for said control channel

40000-0003 (50P4201)

09/711,325

16. (original) The method of claim 15, further comprising:
providing a signal from each tuner at each tuned frequency; and
determining whether said provided signal is said control channel.
17. (cancelled)
18. (previously presented) A set-top unit for connection to a cable television system comprising:
first tuning means for tuning a control channel;
second tuning means for tuning a frequency in a composite signal from said cable television system independently of said first tuning means; and
processing means for controlling said tuning means;
wherein said processing means controls said second tuning means to scan a frequency band to locate said control channel;
wherein said processing means controls said second tuning means to tune frequencies in said frequency band and identify frequencies carrying an active signal; and
wherein said processing means controls said first tuning means to tune said frequencies carrying an active signal to locate said control channel.
19. (previously presented) A set-top unit for connection to a cable television system comprising:
first tuning means for tuning a control channel;
second tuning means for tuning a frequency in a composite signal from said cable television system independently of said first tuning means; and

40000-0003 (50P4201)

09/711,325

processing means for controlling said tuning means;

wherein said processing means controls said second tuning means to scan a frequency band to locate said control channel; and

wherein said processing means divides said frequency band among said first and second tuning means, and controls each said tuning means to search a different portion of said frequency band for said control channel.

20. (cancelled)

21. (previously presented) Computer-readable instructions stored in a medium for recording computer-readable instructions in a set-top unit for connection to a cable television system, the instructions causing a processor of said set-top unit to control at least one programming tuner of said set-top unit to scan a frequency band to locate said control channel;

wherein said instructions further cause said processor to:

control said at least one programming tuner to tune frequencies in said frequency band and identify frequencies carrying an active signal; and

control a control channel tuner to tune said frequencies carrying an active signal to locate said control channel.

22. (previously presented) Computer-readable instructions stored in a medium for recording computer-readable instructions in a set-top unit for connection to a cable television system, the instructions causing a processor of said set-top unit to control at least one

40000-0003 (50P4201)

09/711,325

programming tuner of said set-top unit to scan a frequency band to locate said control channel;

wherein said instructions further cause said processor to:

divide said frequency band among a control channel tuner and said at least one programming tuner; and

control each said tuner to search a different portion of said frequency band for said control channel.

23. (previously presented) A set-top unit for connection to a cable television system comprising:

a control channel tuner;

at least one programming tuner; and

a processor for controlling both said tuners;

wherein said processor is configured to concurrently control both said control channel tuner and said at least one programming tuner to scan a frequency band to locate a control channel.

24. (previously presented) The set-top unit of claim 23, further comprising a memory unit, wherein said processor, before controlling said tuners to scan a frequency band to locate a control channel, checks said memory unit for a last known frequency at which said control channel was broadcast.

40000-0003 (50P4201)

09/711,325

25. (previously presented) The set-top unit of claim 23, wherein:
said processor is configured to control said at least one programming tuner to tune frequencies in said frequency band and identify frequencies carrying an active signal; and
said processor is configured to control said control channel tuner to tune said frequencies carrying an active signal to locate said control channel.

26. (previously presented) The set-top unit of claim 25, wherein, if said control channel is not found at one of said frequencies carrying an active signal, said processor controls said control channel tuner to tune frequencies in said frequency band until said control channel is located.

27. (previously presented) The set-top unit of claim 23, wherein said processor divides said frequency band among said control channel tuner and said at least one programming tuner, and controls each said tuner to search a different portion of said frequency band for said control channel.

28. (previously presented) A set-top unit for connection to a cable television system comprising:

a control channel tuner;

two or more programming tuners; and

a processor for controlling said tuners;

wherein said processor is configured to concurrently control said programming tuners to scan a frequency band to locate a control channel.

40000-0003 (50P4201)

09/711,325

29. (previously presented) The set-top unit of claim 28, wherein said processor is configured to further control said control channel tuner to scan said frequency band to locate said control channel, wherein said control channel tuner and said programming tuners concurrently scan different portions of said frequency band to locate said control channel.